

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0031] of the specification with the following amended paragraph:

[0031] In addition, autonomous systems ~~23 and~~ 25 and 27 include route reflectors (“RR” in FIG. 2) 22A and 22B, respectively, that communicate utilizing an exterior routing protocol, such as BGP (BGP). For example, if autonomous systems ~~23 and~~ 25 and 27 are configured with the same autonomous system number, they could use Interior BGP (I-BGP) routing communications to exchange L2 service information, otherwise they could use multi-hop Exterior BGP (E-BGP) routing communications. Using BGP routing communications, route reflectors 22A and 22B exchange the L2 service information, e.g., VPLS service information 26. In this manner, route reflectors 22A and 22B may be viewed as intermediate route relay devices.

Please replace paragraph [0044] of the specification with the following amended paragraph:

[0044] In addition, router 50 maintains route information 63 that defines routes through a network. Route information 63 ~~50~~ may, for example, define next-hops for reaching customer networks and, in some instances, LSPs for transporting data to the customer networks.

Please replace paragraph [0049] of the specification with the following amended paragraph:

[0049] ~~FIG. 6.~~ FIG. 6 is a flowchart illustrating exemplary operation of router 50 (FIG. 5) in providing VPLS services through one or more intermediate networks in accordance with the principles of the invention. Initially, router 50 establishes LSPs (64) in accordance with MPLS protocol 60B. Router 50 may, for example, establish a LSP with every PE router associated with the L2 VPN to which router 50 belongs. In instances where the LSP spans two or more autonomous systems, border routers, such as border router 31A of FIG. 3, transmits a label associated with the LSP via an extended routing protocol, such as L-BGP, as described above. The LSPs may be established dynamically as L2 services are requested or a priori by a system administrator or automated agent. Router 50 updates router information 63 to include MPLS information regarding the end-to-end LSPs.